

Radioactivity and X-Radiation

962

- 959 Interim Recommendations for the Disposal of Radioactive Wastes by Off-Commission Users. Isotopes Division Circular B-6, United States Atomic Energy Commission, Isotopes Division, Box E, Oak Ridge, Tenn. 10pp.

The basic considerations of disposal are first discussed, including the methods of dilution and dispersion and of confinement and control. The interim recommendations deal with the disposal of particular isotopes, including radioiodine, phosphorus 32, and carbon 14.— Suggestions are offered for others for which the full procedure has not been established.

963

- 960 Medical Aspects of Radiation Safety. B.S. Wolf. Nucleonics 3, 25-29 (Oct. 1948).

The author lists the popular misconceptions of the effects of radiation: (1) You never know when you are exposed to devastating amounts of radiation; (2) radiation produces terrible, bizarre changes in the body; (3) the effects of radiation may appear months or years after exposure; (4) radiation causes sterility and impotence; and (5) radiation will make children freaks. He then discusses them one by one: (1) overexposure could result only from a bad blunder, and personal exposure can easily be detected; (2) the effects of radiation when it penetrates is fairly well known; (3) the effects of single large doses occur fairly early, but incomplete recovery may occur; also, constant exposure may produce delayed effects; (4) overexposure to radiation may cause sterility, but not impotence; and (5) any gross abnormality can be caused only by severe exposure of the fetus. There is a question whether there is a minimum tolerance or whether the small amounts of radiation now existing may affect the race eventually; however, radiation is not the only causative agent for genetic changes.

964

- 961 Stack Meteorology and Atmospheric Disposal of Radioactive Wastes. N.R. Beers. Nucleonics 4, 28-38 (April 1949).

The obvious method of disposal of gaseous waste products is to disperse them from high chimneys, as in many other industries. However, here the question of atmospheric contamination arises. Problems in dispersal are being studied at the Brookhaven National Laboratory, Upton, New York. The present phase of the investigation concerns the dispersion of oil fog smoke and the meteorological data related to the atom plant hazard. The oil fog provides an excellent method of studying dispersal, as it is very visible and stable. The effect of daily changes in meteorological conditions is discussed. These experiments will have a bearing not only on the disposal of radioactive wastes but upon the effect of atmospheric contamination in general.